

# Notice of Allowability

Application No.

10/083,067

Examiner

Michael Kornakov

Applicant(s)

COLE ET AL.

Art Unit

1746

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/27/2004.
2. ☒ The allowed claim(s) is/are 1,3-5,7,10,30-40 and 43-47.
3. ☒ The drawings filed on 27 February 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. P. Daugherty, esq., on 3/10/2004.

The application has been amended as follows:

Cancel claims 23-28.

Claims 23-28 are cancelled as being non-elected for the prosecution in the instant application.

In claim 1 replace the last paragraph after the words "a temperature modifier mechanism adjacent said temperature sensing device, and" by the following --- a computer control unit in communication with the said temperature sensing device, the said temperature modifier mechanism, the said reservoir and the said nozzle to control said temperature modifier mechanism responsive to the sensed temperature of the surface of said metal object, said temperature modifier mechanism configured to responsively modify the temperature of the metal object until the sensed temperature is in a specified temperature range---.

This amendment is made in order to introduce a specific computer control unit, thus distinguishing the instantly recited system from prior art.

Art Unit: 1746

In claim 34 delete the word "the" after the words "the temperature at which"

In claim 35 after the words "The system of claim 34 wherein the" insert ---at least one nozzle is positioned and configured to cause the---

In claim 35 replace the word "engages" after the words "atomized treatment mixture mist" by the words ---to engage---

These amendments are made in order to emphasize the specific orientation of the nozzle.

In claim 43 replace the number "8" after the word "Claim" by the number ---1---  
This amendment is made in order to establish proper dependency.

In claim 46 replace the clause "a control mechanism to control said cooling mechanism responsive to the sensed temperature of the surface of said metal object to a temperature above the melting point of the caustic composition contained in the aqueous solution and below the temperature at which the Leidenfrost effect appears;" after the words "a cooling mechanism adjacent said temperature sensing device," by the following --- a computer control unit in communication with the said temperature sensing device and the said cooling mechanism to control said cooling mechanism responsive to the sensed temperature of the surface of said metal object, said cooling mechanism configured to responsively modify the temperature of the metal object until the sensed temperature is in a specified temperature range;---

In claim 47 replace the clause "a control mechanism to control said temperature modifier mechanism responsive to the sensed temperature of the surface of said metal

Art Unit: 1746

object to a temperature above the melting point of the caustic composition contained in the aqueous solution and below the temperature at which the Leidenfrost effect appears;" after the words "a cooling mechanism adjacent said temperature sensing device, and" by the following ---- a computer control unit in communication with the said temperature sensing device and the said cooling mechanism to control said cooling mechanism responsive to the sensed temperature of the surface of said metal object, said cooling mechanism configured to responsively modify the temperature of the metal object until the sensed temperature is in a specified temperature range;---

These amendments are made in order to clarify the specificities of control unit and better distinguish its capability from prior art.

In claim 47 after the words "wherein there is at least one nozzle disposed on each side of said strip; and" remove the clause "being further characterized by"

These amendments are made in order to introduce a specific computer control unit, thus distinguishing the instantly recited system from prior art.

### ***Response to Applicants' amendment***

2. All previous objections and rejections have been overcome by the amendment filed 2/27/2004 in combination with the Examiner's amendment, and the said objections and rejections are withdrawn.

### ***Allowable claims***

3. Claims 1, 3-5, 7, 10, 30-40, 43-47 are allowed over the prior art of record.

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance:

The closest prior art of record is Fukui et al (U.S. 3,617,039). While teaching the descaling apparatus for treating the surface of steel strip, which includes structural elements similar to those instantly claimed, Fukui et al fail to anticipate or suggest fairly the specific computer control unit, which communicates, among the other elements, with temperature sensing device and temperature modifier mechanism, thus maintaining the temperature of metal object in certain temperature range.

Fukui et al also do not provide or anticipate the other structural elements as instantly claimed, such elements to include a surface coverage analyzer, mounted adjacent to the spraying nozzle, at least one nozzle in communication with at least two reservoirs, the said nozzle adapted to spray atomized mist.

No other prior art that anticipates or suggests fairly a conditioning scale system with combination of structural elements as instantly claimed has been located as of the date of this office action. Therefore, claims 1, 3-5, 7, 10, 30-40, 43-47 are allowed over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1746

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Kornakov  
3/22/04

Michael Kornakov  
Examiner  
Art Unit 1746